## GTAS August Monthly Report

During the month of August work continued on the GTAS application software, additional training was performed via "GO-TO Meeting" from Boulder was conducted on a recent client software upgrade. Also initial briefings concerning the next deployment to Washington State have begun.

After the Texas installation and WFO and EOC users began operations, changes were required to make the system more functional their needs. Thus software development continued on the client application to upgrade their systems.

## **Technical Development**

We began integration of the Meteorological Assimilation and Data Ingest System (MADIS) for the GTAS Texas display. MADIS data consists of cooperative agency atmospheric information that NOAA uses to augment federally acquired data. Cooperative agencies include the Texas Department of Transportation, public utility observations, etc. MADIS data were already included in the GTAS modeling work. This particular effort now makes that data available for user displays on the GTAS client.

Weather Research Forecast (WRF) area model domains that will be used to initialize the toxic plume model were modified at the request of FT Worth forecasters and EOC emergency managers. We also set up the first cut at WRF area domains for the Washington State localization.

The WRF model runs on GSD' high performance computer began in late July for both the 4-km and 2-km nest for Texas. These gridded data sets will replace the current NAM-12 data that is being used to demonstrate the toxic plume model in GTAS. This is important because it means users in Texas will be initializing the plume model from much more accurate wind and stability grids. Further, it helps meet the EOC' requirement to display strong straight-line damaging winds through Dallas County.

The GTAS Server for NWS Western Region Headquarters has been shipped and we are assisting their IT and Systems Administrators with it's configuration and security firewalls. The GTAS server network communications in WR are being handled differently than in SR and required approval from NWS Headquarters CIO' office in Silver Spring.

In addition to the above, NWS Western Region Headquarters has received a small grant from NOAA for experimental development of severe weather displays on cell phones and PDAs. Given our proposed GTAS toxic plume work in Western Region, there is interest in displaying GTAS critical toxic plume information on emergency managers PDAs. We held a two-day meeting in Boulder with WR staff to discuss how to integrate GTAS data into their experimental project. To summarize, we will begin distributing toxic plume files to WR when the Washington State deployment is complete and is operational. This is a great opportunity to leverage the investment of both NOAA and FEMA to develop

this new capability. Their web site for this experimental capability is: http://inws.wrh.noaa.gov/

Work began on the development of the GTAS Evaluation forms to gain more formal user feedback on the system. This helps us understand user requirements more thoroughly which are then reflected in our next software release, and ultimately into our AWIPS II documentation.

The GTAS web site has been modified to allow users to download new client software and documentation as new versions are released. The GTAS client previously installed at the Air Resources Laboratory in Silver Spring has been upgraded.

We received input from the Seattle WFO regarding the inclusion of southwestern Canada as part of their WRF domain area. We coordinated site briefings with the Seattle EOC and the NWS WFO. A canned GTAS application and data set was implemented to provide a briefing to users at the next deployment in Washington State.

We hosted a visit from the FEMA IPO and coordinated site visits for all of us go to the FT Worth WFO and Dallas EOC for further talks and demonstrations.

After receiving input from emergency managers in Dallas we found it necessary to make changes to the GTAS User Guide.

Lastly, the August Project Plan and EVM reports were updated and added to the GTAS web site.